Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A transistor, comprising:

at least a monocrystalline semiconductor layer including a channel region, a lightly doped region, and a heavily doped region; and

a gate insulating film provided ~~on the~~over the monocrystalline semiconductor layer,

the gate insulating film ~~having~~ having:

a thermal oxide film formed on the monocrystalline semiconductor layer and

at least one vapor-deposited insulating film formed on the thermal oxide ~~film.~~film, the at least one vapor-deposited insulating film covering an area including at least the channel region, the lightly doped region, and the heavily doped region of the monocrystalline semiconductor layer.

2. (Original) The transistor according to claim 1, the monocrystalline semiconductor layer being made of monocrystalline silicon.

3. (Original) The transistor according to claim 1, the monocrystalline semiconductor layer being a mesa type.

4. (Original) The transistor according to claim 1, the monocrystalline semiconductor layer having a thickness of 15 to 60 nm.

5. (Original) The transistor according to claim 1, the thermal oxide film of the gate insulating film having a thickness of 5 to 50 nm.

6. (Withdrawn) A method of manufacturing a transistor in which a channel region and source and drain regions are formed in a monocrystalline semiconductor layer and

a gate electrode is formed on the monocrystalline semiconductor layer with a gate insulating film therebetween, the method comprising:

forming the gate insulating film including at least thermally oxidizing the monocrystalline semiconductor layer to form a thermal oxide film on a surface of the monocrystalline semiconductor layer; and

forming a vapor-deposited insulating film on the thermal oxide film using a vapor deposition method.

7. (Withdrawn) The method of manufacturing a transistor according to claim 6, thermally oxidizing the monocrystalline semiconductor layer to form the thermal oxide film on the surface of the monocrystalline semiconductor layer being carried out by using both a dry thermal oxidation process and a wet thermal oxidation process.

8. (Original) An electro-optical device, comprising:

a transistor according to claim 1.

9. (Original) An electro-optical device in which an electro-optical material is interposed between a pair of substrates facing each other,

a transistor according to claim 1 being provided as a switching element in a display area.

10. (Original) A semiconductor device, comprising:

a transistor according to claim 1.

11. (Original) An electronic apparatus, comprising:

an electro-optical device according to claim 8.

12. (Withdrawn) An electro-optical device, comprising:

a transistor obtained by the manufacturing method of claim 6.

13. (Withdrawn) An electro-optical device in which an electro-optical material is interposed between a pair of substrates facing each other, a transistor obtained by the

manufacturing method according to claim 6 being provided as a switching element in a display area.

14. (Withdrawn) A semiconductor device, comprising:

a transistor obtained by the manufacturing method according to claim 6.

15. (Original) An electronic apparatus, comprising:

a semiconductor device according to claim 10.

16. (New) The transistor according to claim 1, further comprising:

a capacitor line, the monocrystalline semiconductor layer further having a storage capacitor electrode portion, the thermal oxide film and the vapor-deposited insulating film being interposed between the capacitor line and the storage capacitor electrode portion and serving as a dielectric.

17. (New) An active switching element, comprising:

a monocrystalline semiconductor layer having a surface and a side extending substantially perpendicular to each other;

an insulating film covering both the surface and the side of the monocrystalline semiconductor layer, the insulating film having:

a thermal oxide film formed on the monocrystalline semiconductor layer; and

at least one vapor-deposited insulating film formed on the thermal oxide film.